

Internal Revenue Service  
**memorandum**

CERTIFIED MAIL  
#  
RETURN RECEIPT  
REQUESTED

date: **MAR 19 1987**

to: District Counsel, Milwaukee CC:MIL

from: Director, Tax Litigation Division CC:TL

subject:

Pre-90 Day Case

Your ref: CC:MIL-TL-N-1600-87/RJLong

This responds to your technical advice request dated January 12, 1987.

ISSUE

The allowability of a credit for TYE [REDACTED] for increasing research activities with respect to the design and programming of computer software under the provisions of I.R.C. § 44F (1981) (I.R.C. § 30 (1984)). 9999.98-00.

CONCLUSION

We recommend that the notice of deficiency generally disallow the credit on the ground that the taxpayer has not established the eligibility of its costs therefor, and that no reliance be placed on the proposed regulations.

FACTS

The taxpayer claimed a "research and development tax credit" for the taxable year [REDACTED] for the development of computer software - namely, a marketing information system ("MIS"). The MIS system appears to be a coded series of routines designed to extract specific information from a data base. The taxpayer was assisted in the design of the MIS by an outside contractor. The taxpayer uses the system to get a series of reports useful to it in planning.

The IRS examiner concluded that the software did not qualify for purposes of the credit on the basis (1) that there was no doubt that the program was operationally feasible, and (2) that the taxpayer did not establish that the costs were incurred

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for new or significantly improved software, or that the costs were for modifying previously developed software programs. The taxpayer has protested. The Appeals Office recommends that a notice of deficiency be issued.

#### DISCUSSION

In the taxable year [REDACTED], I.R.C. § 44F provided an income tax credit for certain increases in qualified research expenses. (The section was renumbered § 30 by the Tax Reform Act of 1984). It provided a 25% income tax credit for increased research expenses.

The expenses which qualify for the credit are the same as section 174 research or experimental expenditures. See I.R.C. § 30(d). The definition of research and experimental expenditures in the income tax regulations was republished in 1960. It states that the term means expenditures which represent research and development costs in the experimental or laboratory sense. Treas. Reg. § 1.174-2(a)(1). The definition provides:

(1) The term "research or experimental expenditures", as used in section 174, means expenditures incurred in connection with the taxpayer's trade or business which represent research and development costs in the experimental or laboratory sense. The term includes generally all such costs incident to the development of an experimental or pilot model, a plant process, a product, a formula, an invention, or similar property, and the improvement of already existing property of the type mentioned. The term does not include expenditures such as those for the ordinary testing or inspection of materials or products for quality control or those for efficiency surveys, management studies, consumer surveys, advertising, or promotions. However, the term includes the costs of obtaining a patent, such as attorneys' fees expended in making and perfecting a patent application. On the other hand, the term does not include the costs of acquiring another's patent, model, production or process, nor does it include expenditures paid or incurred for research in connection with literary, historical, or similar projects.

(2) The provisions of this section apply not only to costs paid or incurred by the taxpayer for research or experimentation undertaken directly by him but also to expenditures paid or incurred for research or experimentation carried on in his behalf by another person or organization (such as a research institute, foundation, engineering company, or similar contractor.

...

(3) ... Example (1). A engages B to undertake research and experimental work in order to create a particular product. B will be paid annually a fixed sum plus an amount equivalent to his actual expenditures. ... A may treat the entire \$150,000 as expenditures under section 174. ...

It may be concluded that the development of computer software is not obviously excluded from the above definition. However, in Rev. Proc. 69-21, 1969-2 C.B. 303, it was inferred that the Service did exclude these costs from the purview of § 174, because it therein accepted under section 162 accounting treatment similar to section 174 for the costs of developing software. The revenue procedure, "Guidelines in connection with the examination of Federal income tax returns involving costs incurred to develop, purchase, or lease computer software," states:

### Sec. 3. Costs of Developing Software.

.01 The costs of developing software (whether or not the particular software is patented or copyrighted) in many respects so closely resemble the kind of research and experimental expenditures that fall within the purview of section 174 of the Internal Revenue Code of 1954 as to warrant accounting treatment similar to that accorded such costs under that section. Accordingly, the Internal Revenue Service will not disturb a taxpayer's treatment of costs incurred in developing software, either for his own use or to be held by him for sale or lease to others, where:

1. All of the costs properly attributable to the development of software by the taxpayer are consistently treated as current expenses and deducted in full in accordance with rules similar to those applicable under section 174(a) of the Code; or

2. All of the costs properly attributable to the development of software by the taxpayer are consistently treated as capital expenditures that are recoverable through deductions for ratable amortization, in accordance with rules similar to those provided by section 174(b) of the Code and the regulations thereunder, ...

After the subject § 44F credit provision was added to the Code by the Economic Recovery Tax Act of 1981, proposed regulations applicable to the new section were published in the Federal Register January 21, 1983. The notice of proposed rulemaking includes a proposed amendment to the § 1.174-2 definition which states in pertinent part:

Generally, the costs of developing computer software are not research or experimental expenditures within the meaning of section 174. However, the term "research or experimental expenditures," as used in section 174, includes the programming costs paid or incurred for new or significantly improved computer software. The term does not include costs paid or incurred for the development of software the operational feasibility of which is not seriously in doubt. The costs of modifying previously developed computer software programs, such as the costs of adapting an existing program to specific customer needs, or the costs of translating an existing program for use with other equipment, do not constitute research or experimental expenditures. Whether software is "new or significantly improved" will be determined with regard to the computer program itself rather than the end of the program. For example, the costs of developing a program to perform economic analysis which involves only standard or well known programming techniques are not research

or experimental expenditures even if the economic principles embodied in the program are novel. However, if the programming itself involves a significant risk that it cannot be written, the costs of developing the program are research or experimental expenditures regardless of whether the economic principles or formulas embodied in the program are novel. ...

Example (2). C, which is in the business of designing computers and developing software, designs a computer using a new central processing system. The costs of modifying C's existing software for use with the new system are not research or experimental expenditures within the meaning of section 174 unless the operational feasibility of modifying the software is seriously in doubt.

Prop. Reg. § 1.174-2(a)(3) and (4) (emphasis supplied).

The specific guidelines for computer software supplied by the proposed regulation introduce terms of art new to the existing regulation. Recent events subsequent to the publication of the proposed regulation indicate that these guidelines should not be employed in making a determination in the instant case.

The Tax Reform Act of 1986 prospectively establishes a new definition (of qualified research expenses for purposes of the credit for increasing research activities) which includes certain research with respect to computer software.<sup>1/</sup> In the conference committee report accompanying the bill the committees indicated that in the case of computer software costs incurred in taxable years before the effective date for the new specific rule, the eligibility of such cost for the research credit is to be determined in the same manner as the eligibility of hardware product costs. H.R. Rep. No. 99-841 (Conf. Rep.), 99th Cong., 2d Sess. II-74 (1986) (attached). The conferees further stated that they expected and have been assured by the Treasury Department that guidance to this effect is to be promulgated on an expedited basis. Id.

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<sup>1/</sup> See Internal Revenue Code of 1986, § 41(d)(4)(E), added by section 231 of the Tax Reform Act of 1986, 1986-3 (Vol. 1) C.B. 1, 87.

Accordingly, the Service announced that it will publish regulations addressing the manner in which section 174 of the Code treats software development costs. Notice 87-12, "Treatment of Computer Software for Purposes of the Research Credit (etc.)", 1987-4 I.R.B. 14 (January 26, 1987) (copy attached).

In regard to the section 174 definition, the Notice states further:

...For taxable years beginning before January 1, 1986, the definition of research expenses eligible for the credit is determined by reference to section 174. Final regulations under section 174 will clarify that software development costs qualify as research expenses eligible for the credit under the same standards as apply to the costs of developing other products and processes.

...

Id. Therefore, while the proposed regulation discussed above has not been withdrawn officially, it will be superseded in the near future by the final regulations described in the Notice.

We will inform you of the publication of the regulations promptly. Meanwhile, if it becomes necessary to issue the notice of deficiency prior to publication, we suggest that the explanation of the adjustment deny the credit generally on the basis that the taxpayer has not established that the costs qualify as research expenses eligible for the credit.

We agree that the expenses should not qualify for the credit. In the first place, we believe they are not costs of developing "a product" or "a process". See Notice 87-12. Under general accounting standards, market research or market testing activities are not considered to be research and development activities. See FASB Interpretation No. 6 (February 1975), copy attached. Examples of excluded costs of software also include those incurred for development of a general management information system. Id. We think that the MIS system in your case falls into the excluded category.


In a recent case, the court did not allow the credit for internal use software, while allowing it for commercial use software. In re: Storage Technology Corporation, et al., Debtors, Case No. 84 B 05377 J et al., D. Colo. in Bankruptcy, memorandum opinion regarding IRS claim, December 3, 1986 (copy attached).

This brief discussion, however, is not intended to supply the legal justification for making the adjustment in this case. Reliance will be upon the new regulations when issued.

If you have any questions, please call Joan Domike, FTS 566-3345.

The administrative file, containing Form 1120 (corporation income tax return) for [REDACTED], is herewith returned by certified mail.

ROBERT P. RUWE  
Director

By:   
ROBERT B. MISCAVICH  
Senior Technician Reviewer  
Branch No. 4  
Tax Litigation Division

Attachments:

Administrative File.  
Conference committee report (excerpt)  
Notice 87-12  
FASB Interpretation No. 6  
Storage Technology opinion.